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ABSTRACT

A study examined whether there is a relationship between students' reading grades and the amount of time they spend watching television. Subjects, seventh grade students from three classes (and four reading levels) of a public elementary school in Jersey City were given 84 charts to record their viewing habits for each of the three weeks of the survey. The 20 children who returned televiewing charts for all three weeks were included in the study. The average amount of time each child spent watching television weekly was recorded and then correlated with his or her grade point average. Results indicated that the correlation between average weekly televiewing hours and grade point average was negligible, -.09. (Two tables of data are included, and 16 pages of a related research review, 2 pages of references, and 2 appendixes contained a sample televiewing chart for the survey and a letter to a parent are attached.) (JK)

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The Correlation Between Television Viewing Habits and Reading Achievement

by

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Requirements for the Masters of Arts Degree

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Abstract

The purpose of this study was to determine if there is a relationship between students' reading grades and the amount of time they spend watching television. It was hypothesized that there is a negative correlation between reading grades and the amount of time children spend watching television. Students in three seventh grade classes in a departmentalized setting in an urban public elementary school kept a record of their televiewing hours for three weeks. The average weekly televiewing hours were correlated with the student's grade point average. The major findings of this study indicated that the correlation between average weekly televiewing hours and grade point average is -.09.

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A television set is a fixture in many households. Controversy over its influence on children continues to rage. According to Searls (1985), this controversy centers on children and the impact of television on their personalities, "propensity to violence, and academic achievement."

In his article, "Assessing Academic Achievement," Briller (1984) asks significant questions that concern educators regarding television's influence. He poses the questions: "Are American school children learning more or less well than they used to? If there is a decline in their ability to read and write, is it the fault of television?"

A number of theories have been offered to explain the decline in achievement. One of the most prevalent is the assignment of the blame on heavy television viewing.

Clearly, television does attract children's attention. According to Nielsen, (Briller, 1984) children between six and nine years of age watch television, on the average, about three and one half hours per day.

Williams (Neuman 1984) reported that "television accounts for little variance in achievement. It is neither the villain nor the redeemer some have claimed."

Several schools of thought on the effects of televiewing have emerged. One school of thought claims that there are positive effects, another claims that there are negative effects, while another claims that there are no effects.

Also, others claim that the effects are related to socio-economic status, IQ, and age-related factors.

Because television does attract children's attention and take up time that might otherwise be spent doing other things, one might ask if television has a negative effect on children's academic achievement or classroom performance.

HYPOTHESIS

To provide additional evidence concerning this topic, a study was conducted determine if there is a relationship between students reading grades and the amount of time children spend watching television. It is hypothesized that there is a negative correlation between reading grades and the amount of time a student spends watching television.

According to Neuman (1984), television's potential effect on children's reading performance is an issue of concern among educators. The estimate that by the end of the high school years children will have spent more time watching television than attending school is frequently quoted. This has both alarmed and intrigued researchers. A phenomenon such as television is presumed to have effects on the child.

According to Neuman, historically, media innovations have not been introduced without concern for displacement of other activities. Concerns arise that these take time

away from activities that are thought to be more constructive, such as reading or doing homework.

The attraction of television for school age children has lead to an increasing amount of research on the relationship between television viewing habits and academic achievement. A relationship between television viewing and reading is not disputed. However, there has been a lack of agreement in studies regarding the effects of television viewing on academic achievement. According to Neuman, (1982) the research literature consists generally of small scale studies conducted with different age groups, using diverse methodological strategies. "Therefore, there is a lack of convergence across studies regarding the relationship between television and reading."

Briller (1984) reviews several studies which found positive effects of television viewing on achievement. According to Briller, David England's critique of the California study reported a positive relationship for students with limited English. As television viewing for these students increased up to four hours per day, so too did scores on reading examinations.

Briller reported that preschool programs such as "Sesame Street" help students learn the basics - alphabets and counting - before kindergarten. "Romper Room" and other programs teach more general knowledge such as safety and hygiene. According to Briller, John Culkin of the National

Council for Children and Television notes that children entering first grade today are able to recognize 10,000 words used in sentences as compared to 1,000 at the turn of the century.

Likewise, Strickler and Farr (Briller, 1984) suggest that television broadens the experiential background of children by exposing them to experiences and events to which they might not otherwise have access. It increases the range of language experiences and enables them to communicate more effectively.

Busch's study (1978) in 1978 reached the same conclusion. She observed television's effect on first grade reading is of major proportions. It also benefits older students. She found that programs that appealed to 10 - 12 year old were science - oriented, a subject more easily introduced by television than printed materials. She noted that television also stimulates reading through its airing of stories adapted for television. She reports that 57% of the students surveyed in grades four to six stated that "a TV story had caused them to read a book."

Many studies found a negative association between academic achievement and hours of television watched. Neuman (1982) reviewed the Connecticut Assessment of Education Progress of 1978 - 1979. This study was designed to determine the percentage of students within each grade level who had mastered certain skills. A Cross - Age

comparison of television watching among these children indicated an inverse relationship between grade level and the amount of time spent watching television. Students who viewed an average of four hours of television per night scored lower in reading than those who watched a more moderate amount. Negative relationships between reading and viewing were reported at all grade levels. An analysis of achievement with the amount of time spent viewing clearly indicated that low test scores were associated with more than four hours of viewing per day. These findings agree with state-wide assessments in Rhode Island in 1976, Pennsylvania in 1978, and Texas in 1978.

Searls (1985) reviewed some studies that found negative relationship between television viewing and reading. According to Searls, Hornik found that those who watched more television tend to do less well in school. The California Study of 1982 found that the more time spent watching television, the lower the sixth graders' achievement in reading, math, and writing.

Some studies indicate that IQ and socio-economic status influence the results of studies regarding television and reading achievement. Searls (1985) reports that both Hornik and Neuman found that when IQ and socio-economic status are statistically controlled, television is not a significant factor in predicting reading achievement.

According to Searls (1985) television has a more negative effect or is more injurious to higher achieving students than to lower achieving students. The California Assessment showed steeper achievement declines with increased television viewing for sixth graders in higher socio-economic categories while students in lower socio-economic categories showed gains in achievement as television viewing increased up to three hours per day. After that, achievement declined for those groups as well.

Searls (1985 and Fetler (1984) noted that Morgan found a negative association for television viewing and high IQ students and a positive association for low IQ students in a New Jersey study of 1982. He postulated that heavy viewing may damage those who otherwise might be high achievers, while it might raise the school performance of low achievers.

Neuman (1984) noted that Morgan and Gross' review of literature in the National Review of Mental Health reports that the more one views, the lower the IQ. The study indicated that children with lower IQ's watch more television than others and learned the most from it.

Roderick's study (1985) tried to determine whether gifted and non-gifted middle school students differ in their viewing habits, family rules, television heroes and heroines, programming preferences, bedtime hours, grades in reading, etc. The results of the study suggest that

significant differences exist between gifted and non-gifted students with respect to television habits, family rules, grades in reading, etc. Non-gifted students spent more time watching television after school and in the evenings, stayed up later on school nights, and received lower grades in reading. It was concluded that family rules about television habits do influence school achievement.

Age also seems to be a factor in television viewing and reading achievement. In his review of the literature, Searls (1985) reported the findings of an NAEP Study. The data suggest that age is a major factor in how much television one watches and how it interacts with reading skills. For younger children, reading improves as the amount of television viewing increases to more than four hours daily. As students become older, the beneficial effects of television decreases. By age seventeen, there is a negative association between televiewing and reading achievement. As time spent watching television increases, reading achievement goes down. It was also noted that "students at each age who watch over four hours of television daily display the poorest reading skills. Beyond that, the relationship of television watching and academic achievement depends heavily on the age of the students." For disadvantage children, higher than average levels of television viewing continue to benefit their school

performance as they grow older. For advantage youngsters, the opposite is true.

PROCEDURES

A conference was held with the principal to explain the study and to obtain permission to conduct the study. Next, a meeting was held with all of the seventh grade teachers to explain how the study would be conducted.

The researcher met with each of the seventh grade classes. Each student was given a cover letter and a televiewing chart. The students were told to keep a record of their television viewing times for a period of three weeks in which there were no holidays-one week in October, one week in November, and one week in December. The students were shown how to fill out the chart by writing the actual amount of time in each box that they watched television each day. All questions about the chart were answered.

The televiewing chart listed time periods in one half hour periods beginning at seven o'clock in the morning until twelve o'clock midnight for each day of the week, beginning with Tuesday to Monday of the following week. If more space was needed for viewing times before seven A.M. or after twelve o'clock midnight, the students were instructed to record it on the back of the chart.

Each child was given a televiewing chart on Monday of the survey week and it was collected on Tuesday of the

following week. The first chart was given out on October 19, 1987, for recording of viewing times from October 20-26, 1987. The second chart was given out on November 16, 1987, for recording of viewing times for November 17 - 23, 1987. The last chart was given out on December 7, 1987, for recording of viewing times for December 8 - 14, 1987.

The subjects for the study were seventh grade students from all three seventh grade classes in a departmentalized setting in a public elementary school in Jersey City. The subjects were in four different reading levels in the Ginn Basal Reading Program. Level 14 Remedial consists of those students who are reading below grade level. Level 12 is for those students who are reading on a low seventh grade level. Level 13 is for the average seventh grade reader. Level 14 Advanced is for advanced readers in the seventh grade.

Eighty four charts were given out to the three seventh grade classes for each of the three weeks of the survey. Only those children who returned televiewing charts for all three weeks were included in the study. Twenty students returned televiewing charts for all three weeks of the survey.

The average amount of time spent watching television each week for each child was recorded. This was correlated with the grade point average of each student. The grade point average is the average reading grade as indicated on

the students' report card for the first and second marking periods for the 1987 - 1988 school year.

RESULTS

Table I illustrates the average weekly televiewing hours in relation to the students' grade point average (GPA).

Table I
Rank according to viewing habits and GPA.

Rank according To TV viewing habits		Average Daily viewing	Average Weekly viewing	G.P.A.	Rank in G.P.A.
1.	A	6.53	45.72	76.5	7
2.	B	6.41	44.88	70.	16
3.	C	5.19	36.33	60	20
4.	D	4.99	34.95	86.5	3
5.	E	4.90	34.34	60	17
6.	F	4.12	28.83	75	13
7.	G	3.98	27.83	75	9
8.	H	3.89	27.22	75	12
9.	I	3.69	25.83	91.5	1
10.	J	3.38	23.67	75	14
11.	K	3.32	23.25	70	15
12.	L	3.19	22.36	80	5
13.	M	3.14	21.97	91.5	2
14.	N	2.91	20.34	80	4
15.	O	1.93	13.50	75	8
16.	P	1.79	12.45	75	11
17.	Q	1.78	12.45	60	18
18.	R	1.43	10.0	60	19
19.	S	1.02	7.17	78	6
20.	T	0.12	0.86	75	10

The average weekly viewing ranged from a high of 45.72 hours (45 hours and 43 minutes) to a low of .86 hours - an average of about 52 minutes of televiewing per week. The heaviest viewer watched television for a total of 137.11

hours (137 hours and 10 minutes) during the three weeks of the study. The lightest viewer reported a total of only 2 hours and 35 minutes of televiewing during the three weeks of the study. The mean weekly televiewing hours was 23.70 hours (23 hours and 42 minutes) per week or 3.39 hours (3 hours and 24 minutes) per day.

Many of the heavy viewers reported watching television as early as 7:00 A.M. on weekdays and as late as 11:00 P.M. on weeknights. Many students watched television during their lunch hour. None reported watching later than 12:00 midnight. The two heaviest viewers reported watching television almost constantly for at least one weekend during the study, beginning as early as 7:00 A.M. until 10:00 or 11:00 P.M. The heaviest viewer reported that she watched television for 10 hours and 44 minutes one Saturday during the study. The second highest viewer reported more than 12 hours of televiewing per day during one weekend of the study. His total weekend televiewing average for the three weeks of the study was 10 hours and 26 minutes.

During the course of the study, several students reported that they could not watch television because they were "on punishment." Of the students included in the study who were "on punishment," two are considered heavy viewers who ranked in third and sixth place in televiewing hours. The third student is considered a light viewer who ranked 18th in television viewing hours.

In this school system letter grades are given on the pupils' report cards. The numerical equivalents of the letter grades are as follows: A ranges from 90 to 100; B ranges from 80 to 89; C ranges from 70 to 79; and F is below 70. In order to obtain a numerical average, the midpoint for the value of each letter grade rounded to a whole number was used. If a student was given a letter with a plus (+), it was assigned a value halfway between the assigned numerical value and the lowest numerical value of the next higher letter grade. The letter grade of F was assigned a numerical value of 60.

As indicated in Table I, the average grade point average for the two marking periods ranged from a high of 91.5 to F for failure. Two students had a grade point average (GPA) of 91.5 or the equivalent of an A average. Three students had a B average. One student had a C plus average and 10 students had the equivalent of a C average. Four students had an F average. In assigning rank order with respect to GPA for students who had the same average, the students were ranked according to their reading level in the Ginn Basal Reading Program. For example, for students whose average was 75, students reading in Level 13 were given a higher rank than students who were reading in Level 12. Students reading in Level 12 were given a higher rank than students reading in Level 14 Remedial who had the same

average. (No students in Level 14 Advanced returned all three survey charts).

Table II gives the mean, standard deviation, and the correlation between the average weekly televiewing hours and the GPA of the students. As can be seen, the mean weekly televiewing hours was 23.70 or 23 hours and 42 minutes. The mean GPA was 74.5 or the equivalent of a C. The correlation between the average weekly televiewing hours and GPA was -.09.

Table II

Mean, Standard Deviation, and Correlation Between Television Viewing Hours and Grade Point Average.

	Mean	Standard Deviation	Correlation
Average Weekly Television Viewing Hours	23.70	12.03	
			-.09
Grade Point Average	74.45	9.41	

CONCLUSION

The purpose of this study was to determine if there is a relationship between students' reading grades and the amount of time they spend watching television. It was hypothesized that there is a negative relationship between reading grades and the amount of time children spend watching television.

The number of hours that seventh graders spend watching television was surveyed for three weeks in which there were no holidays - one week in October, one week in November, and one week in December. The children were given a weekly televiewing chart to record the actual amount of time they watch television each day. The results were tabulated and an average weekly number of television viewing hours was computed for each student. This was correlated with the grade point average of each student.

The major findings of this research indicate that the correlation between GPA and the average weekly televiewing hours was -.09. This is a negligible correlation. This weak, negative correlation seems to support the hypothesis that there is a negative correlation between televiewing and GPA.

The findings of this study agreed with those of Childers (1973), Moldenhauer (1980), and Sauta (1981) who found weak, but not significant negative correlations between televiewing and achievement. The findings of the study also

parallel findings by Williams (1982) who found that for all correlations of the studies he reviewed, the median association between televiewing and achievement was -.06.

The research shows a diversity of opinion. Studies by Price (1986), Ridley-Johnson (1983), Welschka (1978), and Greenstein (1954) found significant negative correlations between television viewing and reading achievement. Conversely, a positive relationship between television viewing and achievement was found by Rice (Phi Delta Kappan, 1986), and Hamilton (Neuman, 1980) and the California Study (Briller, 1984).

Some of the positive effects of television viewing were reported by Briller (1984) and Rice (Phi Delta Kappan, 1986). They reported that television influences the vocabulary development of pre-school and primary children. It broadens the language experiences of children, exposing them to experiences and events to which they might not otherwise have access. Busch (1978) and Hamilton (Neuman, 1980) suggest that television stimulates reading through its airing of stories adapted for television.

Concerns about the negative effects of television viewing were cited by Neuman (1980) and Ridley-Johnson (1983). They suggest that television viewing takes time away from other activities that are thought to be more constructive, such as reading or doing homework. Morgan (1980) postulated that television viewing may damage those

who otherwise might be high achievers while it might raise the performance of low achievers.

This researcher found that children viewed an average of 23.70 hours (23 hours and 42 minutes) of television per week or 3.39 hours (3 hours and 24 minutes) per day. This corresponds to the weekly average of 23 hours and 19 minutes indicated by Larrick (1987). The daily average of 3.39 hours of televiewing found by this researcher was slightly less than the average daily televiewing hours of 3.9 reported by Greenstein (1954) and 4 hours per day reported by Moldenhauer (1980). Childers (1973) found an average of 3.3 for weekdays. He noted that the average televiewing hours has changed little in the years between 1953 and 1973.

A review of the literature indicate that there are no conclusive findings of television's effect on achievement. More research is needed to provide more clear and precise data on the effects of television on academic achievement.

Williams (1982) integrated empirical findings of studies concerning the impact of television on students' achievement. Future research might replicate Williams' study and integrate findings since 1982.

It was noted that much of the related research investigated whether television viewing had a positive or negative effect on achievement. In order to get more conclusive findings about the effects of television viewing, more

research needs to be done in terms of the effects of televiewing on different age groups, sex groups, IQ groups, socio-economic groups, and urban versus suburban students.

Recently there has been concern about the influence of video games and personal computers. Future research might investigate televiewing and the use of new media such as video games and personal computers on achievement.

The Correlation Between Television Viewing Habits and Reading Achievement: Related Literature

The relationship between the television viewing habits of children and school performance, especially reading achievement, has been of interest for nearly three decades. In reviewing the studies, which extend over thirty years, it was found that there is a lack of agreement as to the effects of television on achievement.

Studies of the effects of televiewing on achievement can be categorized into several schools of thought. One school of thought claims that watching television has a positive effect on achievement while another claims that the effects on achievement are negative. Still another school of thought claims that there are no significant effects, pro or con, of televiewing on achievement. Other studies have investigated the effects of televiewing in terms of intelligence, socio-economic status, sex, and age-related factors.

Studies by Rice (Phi Delta Kappan, 1986) suggest that television can have a positive influence on the language development of pre-school children. Rice found that programs such as "Sesame Street" and "Mr. Roger's Neighborhood" "speak in short sentences, use the present tense, and limit their observations to the here and now." Also, they present language a child can understand. Mr. Rogers speaks "motherese" while cartoon characters speak "garbargese." Dialogue in cartoons also makes use of puns and complex sentences.

It was noted that parents tend to use "Mr. Roger's Neighborhood" and "Sesame Street" as talking books. Parents and children tend to interact in the same way while watching these shows as they do while reading.

Another study by Rice was based on the observations of sixty children between three and five years of age. It was found that children learned difficult words such as "trudge" and "gramophone" after watching a short television program. She noted that young normal children can easily pick up language from television.

Neuman (1980) reviewed a study by Hamilton in 1976 which found that television can stimulate children to read. Hamilton conducted a survey analyzing the reading habits of 253 seventh graders. During a six-week period, they were given a choice of reading books related to or not related to television (TV tie-ins). Students preferred the television-related books. They read seven tie-ins during the experiment, compared to three customary titles. Hamilton concluded that instead of being an obstacle to reading, television might provide an incentive to many reluctant readers.

However, Neuman takes issue with this. Although it appears that in some cases television has been used effectively to teach and reinforce reading skills, some questions still remain unanswered. She asks if using childrens' interest in the media, as in the case of the

television tie-ins, contributes to the decline in the quality of reading materials. She wonders if this encourages an increasing dependence on television in the schools and at home.

Several studies found a negative relationship between televiewing and achievement. Price (May, 1986) conducted a three-year study of the relationship between television viewing and children's acquisition of reading skills. Children in the second and third grades in nine elementary schools and five middle schools completed questionnaires and kept televiewing diaries. The results of the study indicated a significant but relatively weak negative relationship between television viewing and reading achievement. However, the hypothesis that reading time would be displaced by television was not supported. Also, the hypothesis that there is a relationship between the family media environment and students' reading achievement was not supported for the full sample of students in the study.

Ridley-Johnson (1983) used a large sample of students in grades five to eight to study the relationship between television viewing behavior and school achievement. It was hypothesized that television viewing would have a negative effect on school achievement because children may choose television over other activities such as reading which would adversely affect basic skills development. The

results of the study indicated that children whose parents set rules for watching television had better grades in school and higher intelligence scores. There was a small negative relationship between school achievement and television viewing. More televiewing was associated with lower grades in reading and a lower IQ.

Hornik (1978) also found a negative relationship between televiewing and achievement. He investigated the effects of TV use on growth in reading skills, general ability, and classroom achievement of El Salvador students in grades seven through nine over a two year period. The effects of television access, especially the recent acquisition of a television, on each of three separate groups of students were examined. The results of the study indicated that with a junior high school population, there is "no evidence of a television exposure effect in a specific subject achievement but a striking negative association of television exposure with long term reading skills growth."

In a study of sixth grade students, Greenstein (1954) found that those who owned television sets consistently but not significantly achieved higher in school than those who did not own television sets. Even though he found no significant differences in terms of the effect of varying number of televiewing hours upon grades, it was found that students who watched less than the daily mean of 3.9 hours had a higher mean grade point average than those who

watched more than the mean. This led him to suspect a negative relationship between viewing time and grades. However, in his conclusion, he quoted the principal of the school in which the study was done: "It is my contention that students who neglect their homework because they are watching television would fail to do their homework for some other reason if they had no TV."

Welschka (1981) found a significant negative correlation between reading achievement and the amount of time third graders spend watching television. She surveyed seventy third graders from four classrooms in one elementary school. The subjects were divided into three reading groups. The reading levels were determined by teacher recommendation and the Reading Subtest of the Iowa Test of Basic Skills. The grade equivalent scores for the six children in the low reading group ranged from 1.7 to 2.7. The middle group consisted of 18 children whose scores ranged from 2.8 to 4.5. The range of scores for the twenty one children in the high reading group was 4.6 to 6.2.

The findings from the survey, which was conducted for two weeks, indicated a significant negative correlation. The high reading group watched an average of 10.61 hours of television per week as compared to 11.37 hours per week for the middle group and 19.23 hours per week for the low reading group. The results indicated that as viewing went up, reading achievement went down.

List (1978) investigated the relationship between the amount of televiewing, the type of program watched, and the reading achievement of second grade children in Montclair, New Jersey. The study included all second graders in the Montclair School District which consisted of five elementary schools. Data was collected for the week of December 3, 1987. The subjects were reading one year or more above grade level, or reading in a primer or below as designated by their classroom teachers. Thirty six children were reading below grade level and forty-one were reading above grade level.

It was found that low achievers watched an average of 18.7 hours of television per week. High achievers watched an average of twelve hours of television per week. A negative correlation between reading and televiewing was found.

Studies by Morgan (1980) and Witty (Childers, 1973) investigated televiewing in relation to IQ. Morgan's study attempted to determine the relationship between reading and television viewing for a wide cross section of socio-economic levels to further define some of the processes at work. Students in grades six through nine in a New Jersey public school completed questionnaires related to television viewing, amount of time spent reading for fun, and kinds of things they like to read.

The results of the study indicate that those with lower IQ's watch more television than those with higher IQ's. The association is significantly stronger for boys than for girls. Television is negatively and significantly related to the scores on all eleven achievement tests. The strongest association was with reading comprehension scores. These relationships are not affected by controls for sex, grade, and socio-economic status. These relationships are also stronger for boys than for girls. Among girls with low IQ's, those who are heavy viewers score higher on reading comprehension than those who are light viewers. There was a clear tendency for viewing a lot of television to be associated with the "center" of achievement - that is, heavy viewers within each IQ group have the score that is the closest to the fiftieth national percentile rank of grade equivalents.

Witty's study of 1951 (Childers, 1973) found that IQ was unrelated to the time spent watching television. However, some noticeable differences were found when students whose IQ's were in the upper and lower quarters of the class were compared. Those with scores in the top fourth of the class averaged twenty hours of televiewing per week while those in the lowest fourth averaged twenty six hours of televiewing per week. It was concluded that excessive viewing may be associated with somewhat lower academic achievement.

Studies by Schramm (Moldenhauer, 1980) and Busch (1978) indicate that age is also a factor in television viewing and reading achievement.

Schramm's study of 1961 (Moldenhauer, 1980) is considered to be most definitive because it included children who did not have a television set. Schramm concluded that television has a greater impact than any other leisure time activity on the amount of reading a child does. During the early school years, there is a positive effect on vocabulary skills. This corresponds to Rice's findings as reported in Phi Delta Kappan (February, 1986). Also, it was found that televiewing time rises gradually until it peaks at grades six to eight, then it begins to fall. However, children with IQ's above 115 reached a saturation level soon after age ten, while children in the middle and low IQ groups did not reach this level until later.

Busch did a study to detect possible changes since Schrammn's study of 1961 which "established that elementary school children with the highest marks in school were also the heaviest television watchers." She surveyed 595 middle-income rural and suburban students from grades two through twelve in two Virginia counties.

Busch's study supported Schramm's study in most respects. She found that pre-school and primary children benefited most from TV viewing. It was found that second and third graders who were avid readers also watched large

amounts of television. For children in grades four to six, the low ability readers began to watch more television than before. For all ability groups, these grades were the "period of greatest television consumption." For middle and high ability students, televiewing began to peak in the seventh grade and from then on, it began to have a negative effect.

Studies by Childers (1973), Moldenhauer (1980), and Sauta (1981) found no significant relationship between the amount of time children spend watching television and their achievement in school.

Sauta (1981) surveyed the viewing habits of seventh graders for three weeks in December, 1980. Televiewing habits were correlated with scores in vocabulary and comprehension on the California Achievement Test. She found a negative but not significant relationship between televiewing and reading achievement.

Moldenhauer's study (1980) investigated the relationship between televiewing and reading achievement of 608 middle income seventh grade students in a medium size mid-western city. It was hypothesized that there is no significant correlation between television viewing and reading achievement. The hypothesis was supported by the findings. It was found that the good readers did not watch more or less television than poor readers. These children watch television an average of four hours after school during the week.

Both good and poor readers were in the "peak viewing years" described by Schramm and Busch.

Childers' study (1973) investigated the televiewing habits of 100 middle elementary students in relation to IQ, grade point average, and achievement on standard tests. A study of the relationship between televiewing hours, IQ, and achievement scores with grade point average indicted that there was no significant relationship between the amount of hours a child spends watching television and his grades in school. It was concluded that IQ is not related to time spent watching television. It was noted that children watch television an average of 3.3 hours during the week days and this has changed little in the years between 1953 and 1973 when Childers'study was done.

Williams et al. (1982) integrated empirical findings concerning the impact of televiewing on students' achievement from kindergarten through the twelfth grade. Twenty three studies representing findings in England, Japan, Canada, and five sections of the United States were reviewed. The studies, which covered a period of twenty six years, ranged in size from 67 students in one survey to 33,233 students in a national survey. Together the studies contained 277 correlations between different measures of achievement and different estimates of television viewing times.

The results of the study indicate that for all correlations, the median association between television viewing and achievement was -.06 which indicates that more viewing was found among children with slightly lower achievement. Of a total of 277 correlations, 95 were positive and 182 were negative.

Further analysis of the findings indicate that the total amount of viewing time changes the effect of achievement. For children who watch from one to ten hours per week, the correlation was positive, indicating that a small amount of viewing is associated with higher achievement than no viewing at all. From eleven to thirty-five hours per week, there were negative correlations of about -.09, showing that as viewing increased, achievement declined slightly. Beyond 35 hours per week, increased viewing had no additional negative effects.

These relationship have not been explained. It is suggested that children who watch television a few hours per week are kept abreast of the current events which may influence their achievement. Perhaps extremely high amounts of viewing, 20-30 hours per week, are typical of children who are less motivated for school achievement. When the television is turned on, the processes of active learning needed for school achievement may be turned off.

Differences between sex and IQ levels were also found. For girls, the correlation between viewing and achievement

was -.13, whereas for boys, it was -.04, which indicated a significantly greater impact of television upon achievement for girls than for boys. For high IQ students, the correlation was more negative (-.14), than it was for medium IQ (-.05) or low IQ (-.04) students. That is, high IQ students were more negatively affected by viewing than medium and low IQ students.

A number of factors made no difference. The relationship of viewing and achievement was not affected by geographical area. Also, the year the study was conducted made no difference. The televiewing achievement relationship did not vary according to the characteristics of the sample or the methodological characteristics of the studies. Age of the viewers, which varied from five to seventeen years, was not consistently related with positive or negative correlations.

Subject area of achievement was not consistently related to television viewing. For reading, the overall correlation was -.06, which was based on 66 correlations. For spelling, math, and study skills, similar correlations were found. In science, a higher negative correlation (-.21) was found. All subject matters were negatively affected and none were positively supported by television viewing.

Hornik (1981) categorized the hypotheses of studies that have related television use to reading into six categories.

Each details an alternative mechanism through which television might affect children's achievement.

The "Displacement" hypothesis argues that time spent watching television detracts attention from helpful activities such as reading, doing homework, or interacting socially, etc.

The "Development of an intolerance for the pace of school" hypothesis suggests that television exposure has a negative effect on school performance because it offers no effort entertainment. Because it offers fast-paced, attention-grabbing gimmicks, it is feared that extended exposure might lead to a lowered tolerance for the pace of the classroom.

The "Interest" hypothesis argues that children who see a program on a given topic are likely to display greater interest in it in the classroom or read a book if they have seen the movie or a TV show based on it.

"Learning of school content" hypothesis suggests that there is an overlap between what TV presents and some of the outcomes sought in school - that is, television may supplement school based instruction in vocabulary development, social studies and civics, science, and even reading.

"Learning of new cognitive skills" hypothesis suggests that television may improve skills other than those that are taught in school. Because of the uniqueness of certain types of symbol systems, it may be training students to

process information in a way that is different from that which reading emphasizes.

"Learning of instrumental information" hypothesis has been investigated the least. It suggests that students learn expectations about behavior and what they are to expect from school. These, in turn, color their actual school behavior.

There is a lack of definitive results of studies in each category.

A review of the literature indicates that there are no conclusive findings of television's effect on achievement. Hornik (1981) suggests three possible explanations for the scarcity of significant findings. First, it is almost impossible to find an area in the industrialized world where children have not been exposed to television. Therefore, it is difficult to make comparisons on the effect of televiewing. Also, the various component effects of television, some positive and some negative, may cancel each other out. Then, too, large effects on certain subgroups may be masked by an overall relationship which appears rather weak.

One reason for television's great attraction for children was cited by Nancy Larrick (1984). Her comments in Phi Delta Kappan relates to Hornik's "Development of an intolerance for the pace of school" hypothesis. She states

that television provides the fun and excitement that children don't get during the school day.

She criticizes the trivial language used in basal readers that children are faced with during the day as being "stilted, unnatural, unrelated, and meaningless." She criticizes their lack of literature and their over-emphasis on "mechanistic skill and drill which appeals neither to the intellect nor to the emotions." She contends that it is no wonder that children rush home to watch more than 23 hours and 19 minutes of television per week. She states that television provides "fast-paced action and a steady emotional pull in language that is familiar-all of which are missing from the preprimers and primers."

Larrick suggests that adults try to visualize what the children feel after watching the "Cosby Show" (children's favorite show according to the Nielsen ratings) and then returning to school the following day to face more drill and practice exercises in a basal reader. She warns that probably these children will switch their thoughts to other things just as they switch television channels when one program is disappointing.

Another reason why some individuals spend great amounts of time watching television was cited by Dr. Joyce Brothers in her column in the Newark Star Ledger (February, 1988). She stated that some individuals use it as an escape from loneliness. She reports that according to Dr. Kubey, some

individuals use it as an escape from anxiety during idle moments.

She reports that Dr. Kubey found that heavy viewers reported more negative feelings when alone and when they had nothing to do than lighter viewers. Heavy viewers felt better when their lives were more structured. For them, television seems to offer a ready means of structuring attention that permits them to escape from idle time and to avoid the discomfort that normally occurs during idle time.

In addition to the continuing concern about the effects of televiewing, recently there has also been concern about the influence of video games and personal computers (Price, 1986). Findings to date indicate that children's involvement with these new media may affect their televiewing habits as well as their achievement in school.

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APPENDIX

Name _____ Date _____

Time	Tue	Wed	Thur	Fri	Sat	Sun	Mon
7:00 - 7:30							
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October 19, 1987

Dear Parent,

I am doing a research project which involves doing a survey of the amount of time seventh graders spend watching television. For this project, I would like to include all the seventh grade classes.

I am asking your son/daughter to keep a record of his/her television viewing times for a period of three weeks - one week in October, one week in November, and one week in December.

A chart is being sent with this letter for recording of the viewing times from October 20-26, 1987. It will be collected on October 27, 1987. The second chart will be given out on November 16, for recording of viewing times for November 17-23, 1987. It will be collected on November 24, 1987. The last chart will be given out on December 7, for recording of viewing time for the period from December 8-14, 1987. It will be collected on December 15, 1987.

Thank you very much for your cooperation.

Sincerely yours,

Mrs. Shell